

ABSTRACT

A thermoelectric element (1) comprises N type thermoelectric semiconductors (4) and P type thermoelectric semiconductors (5) arranged between support members (2, 3). The N type and P type thermoelectric semiconductors (4, 5) are connected together in series by heat absorbing electrodes (6) and heat radiating electrodes (7) joined to the ends of these semiconductors. First heat transmitting members (8) are integrally provided to the heat radiating electrodes (7), and second heat transmitting members (9) are integrally provided to the heat absorbing electrodes (6) and are allowed to protrude in the same direction as (in a direction opposite to) the direction of the first heat transmitting members (8). The second heat transmitting members (9) function as heat radiating media when the thermoelectric element (1) is not in operation to dissipate the heat of a component (16) to be cooled into a radiation space via the second heat transmitting members (9).